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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,197

01/30/2006

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SP03-100

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05/14/2009

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

05/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,197	<b>Applicant(s)</b> ABBOTT III ET AL.	
	<b>Examiner</b> George P. Wyszomierski	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 4/13/09 (RCE, Amendment).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 and 13 is/are allowed.
- 6) ☒ Claim(s) 12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 13, 2009 has been entered. Claims 1-14 are pending in this application.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohashi et al. (U.S. Patent 5,514,347).

Ohashi discloses forming a honeycomb structure by a process substantially as recited in claim 14. Ohashi discloses forcing a metal feed stock through a plurality of holes in an extrusion die thereby creating an extrudate that includes an interconnected wall structure including channels and channel walls in a honeycomb shape, i.e. an extruded metal honeycomb as recited in claim 12. Ohashi does not specify the particular configuration(s) of the feed stock as recited in claim 14, does not specify that the starting material is initially softened or a final step of cooling below the softening temperature, and does not specifically set forth the process limitations referred to in product-by-process terms in claim 12. However,

a) With respect to the configuration of the feed stock, Ohashi employs powders for this purpose, and this would appear to be at best an obvious variant of the use of "nuggets" as recited in claim 14. A nugget would be nothing more than a larger size powder.

b) It would have been considered an obvious expedient to one of ordinary skill in the art to soften metal prior to performing an extrusion process with the metal, i.e. to ensure proper deformation of the metal with a relative absence of cracking or other negative consequences of a severe mechanical process such as extrusion.

c) With regard to cooling, the examiner submits that any practical application of an extruded metal would require that one cool the extrudate below the softening temperature after extrusion, in order to form a rigid mechanical structure. This would clearly be required if one intended to use the extrudate in a catalytic converter, as done by Ohashi.

d) With regard to the process limitations of claim 12, this is not seen as resulting in a patentable distinction between the prior art and the claimed invention because a product-by-process claim defines a product. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process; see *In re Thorpe* (227 USPQ 964, Fed.Cir. 1985). The burden then shifts to Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product; see *In re Marosi* (218 USPQ 289, Fed.Cir. 1983). In the present case, Applicant has not met this burden because it is unclear what, if any, physical distinction would exist between the extruded metal honeycombs of Ohashi and those presently claimed. Thus, at a minimum, the extruded products as presently claimed are held to be prima facie obvious in view of the disclosure of Ohashi et al.

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Thus, a prima facie case of obviousness is established between the disclosure of Ohashi et al. and the presently claimed invention.

4. Claims 1-11 and 13 are allowable over the prior art of record. The prior art does not disclose or suggest a process as defined in claim 1, particularly one in which the metal feed stock does not comprise a metal powder. The prior art further does not disclose or suggest an article having the cell density, wall thickness, and porosity limitations as recited in claim 6. The remainder of the prior art cited herein is of interest; much of this art is directed to making honeycombs from powder feed stock and/or of honeycombs of much higher cell density than presently claimed.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. All patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/George Wyszomierski/  
Primary Examiner  
Art Unit 1793

GPW  
May 8, 2009